

**MMLA Mathematics Assessment Items  
Answer Key**

**Multiple Choice**

<b>Item No.</b>	<b>Correct Answer</b>	<b>GLCE</b>	<b>MEAP Code</b>
1	D	N.ME.04.04	ext
2	D	N.ME.04.05	core
3	B	N.ME.04.05	core
4	C	N.ME.04.05	core
5	A	N.ME.04.05	core
6	D	N.MR.04.06	ext
7	C	N.MR.04.07	core
8	B	N.MR.04.07	core
9	C	N.MR.04.07	core
10	B	N.FL.04.08	ext
11	A	N.FL.04.08	ext
12	C	N.ME.04.09	core
13	B	N.ME.04.09	core
14	C	N.FL.04.10	ext
15	D	N.FL.04.10	ext
16	B	N.FL.04.11	core
17	C	N.FL.04.11	core
18	A	N.FL.04.11	core
19	B	N.FL.04.11	core
20	B	N.FL.04.11	core
21	D	N.FL.04.12	core
22	D	N.FL.04.12	core
23	B	N.FL.04.12	core
24	D	N.FL.04.12	core
25	D	N.MR.04.14	ext
26	C	N.MR.04.14	ext
27	D	N.ME.04.15	core

28	B	N.ME.04.15	core
29	B	N.ME.04.15	core
30	D	N.ME.04.15	core
31	D	N.ME.04.17	ext
32	C	N.MR.04.19	core
33	A	N.MR.04.19	core
34	B	N.MR.04.19	core
35	A	N.ME.04.20	ext
36	C	N.ME.04.20	ext
37	C	N.ME.04.20	ext
38	C	N.ME.04.20	ext
39	B	N.MR.04.22	core
40	A	N.MR.04.23	ext
41	B	N.MR.04.23	ext
42	D	N.MR.04.25	ext
43	C	N.MR.04.26	ext
44	C	N.FL.04.34	ext
45	A	N.FL.04.34	ext
46	A	N.FL.04.34	ext
47	C	N.FL.04.35	core
48	D	N.FL.04.35	core
49	B	M.UN.04.01	core
50	C	M.UN.04.01	core
51	C	M.PS.04.02	core
52	C	M.UN.04.03	core
53	C	M.TE.04.05	ext
54	D	M.TE.04.05	ext
55	C	M.TE.04.06	core
56	A	M.TE.04.06	core
57	B	M.TE.04.07	core
58	C	M.TE.04.08	ext
59	C	M.TE.04.10	ext

60	A	M.TE.04.10	ext
61	B	M.TE.04.10	ext
62	C	M.TE.04.10	ext
63	B	G.GS.04.01	ext
64	A	G.GS.04.01	ext
65	B	G.GS.04.01	ext
66	C	G.GS.04.01	ext
67	A	G.GS.04.01	ext
68	B	G.GS.04.02	core
69	D	G.GS.04.02	core
70	B	G.SR.04.03	core
71	B	G.SR.04.03	core
72	D	G.SR.04.03	core
73	B	G.TR.04.04	ext
74	B	G.TR.04.04	ext
75	C	G.TR.04.05	core
76	C	D.RE.04.01	ext
77	A	D.RE.04.02	core
78	C	D.RE.04.02	core
79	B	D.RE.04.02	core
80	B	D.RE.04.02	core
81	D	D.RE.04.02	core
82	C	D.RE.04.02	core
83	A	D.RE.04.02	core
84	C	D.RE.04.03	core
85	A	D.RE.04.03	core
86	B	D.RE.04.03	core
87	B	D.RE.04.03	core

## Open Ended

Item No.	Correct Answer	GLCE	MEAP Code
1	1 x 50; 2 x 25; 5 x 10	N.ME.04.04	ext
2	Use your calculator to check students' work. Look for specific computation errors if a student gets a wrong answer.	N.FL.04.10	ext
3	Use your calculator to check students' work. Look for specific computation errors if a student gets a wrong answer.	N.FL.04.11	core
4	3 of the 5 boxes should be shaded. Alternatively, a student could shade $\frac{3}{5}$ of each box.	N.ME.04.20	ext
5	Both fractions are at the same place on the number line, half-way between $\frac{1}{2}$ and 1. To locate $\frac{3}{4}$ , students should divide the number line between 0 and 1 into 4 sections, placing the fraction at the 3 <sup>rd</sup> mark. To locate $\frac{6}{8}$ , students should divide the number line between 0 and 1 into 8 sections, placing the fraction at the 6 <sup>th</sup> mark.	N.MR.04.21	ext
6	One strip can be divided into two equal parts, and one part shaded. The other strip can be divided into 4 equal parts, and two parts shaded. The shaded portions should line up to show the equivalence.	N.MR.04.21	ext
7	Fraction bars should show that 1 part out of 3 equal parts is the same as 2 parts out of 6 equal parts (as long as the fractions bars are the same length). On the number line, the length from 0 to 1 can be divided into 3 equal parts, or 6 equal parts, showing that $\frac{1}{3}$ is at the same location as $\frac{2}{6}$ .	N.MR.04.21	ext
8	$1\frac{1}{4}$ is located at 2 and $\frac{3}{4}$ , which is equivalent to $2\frac{9}{12}$ . Therefore, $1\frac{1}{4}$ is larger than $2\frac{7}{12}$ .	N.MR.04.22	core
9	$\frac{3}{2}$ is equivalent to $1\frac{1}{2}$ , so $2\frac{1}{2}$ is larger.	N.MR.04.22	core
10	They are all equivalent. The drawings should show that 2 thirds, 4 sixths and 8 twelfths are all the same amount. (The $\frac{2}{3}$ drawing should be divided into 3 equal parts with 2 shaded; the $\frac{4}{6}$ drawings should show 6 equal parts with 4 shaded, etc.)	N.MR.04.23	ext
11	The drawing should show that $\frac{1}{4}$ is the same as $\frac{2}{8}$ , or that $\frac{1}{8}$ is half of $\frac{1}{4}$ (or some other equivalent relationship between them).	N.MR.04.23	ext
12	$\frac{13}{3}$ is equivalent to $4\frac{1}{3}$ .	N.MR.04.25	ext

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| 13 | The picture shows $2\frac{3}{4}$ , which is equivalent to $1\frac{1}{4}$ .  | N.MR.04.25 | ext |
| 14 | $\frac{1}{6}$ , $1\frac{2}{3}$ , $1\frac{1}{3}$ ( $3\frac{2}{3}$ )  | N.MR.04.26 | ext |
| 15 | $\frac{3}{4}$ , $1\frac{1}{4}$ , $\frac{9}{4}$ ( $2\frac{1}{4}$ )   | N.MR.04.26 | ext |
| 16 | To draw parallel lines, students will first have to draw perpendicular lines, then draw a third line perpendicular to one of the first two lines. | G.GS.04.01 | ext |
| 17 | Students' bar graph should show 12 votes for Dalmations and 8 votes for Collies.  | D.RE.04.01 | ext |
| 18 | \$32. Students might create a table to prove their answer.  | D.RE.04.01 | ext |